In an STOEM Universe, the Question of P = NP Needs to Be Reimagined

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In the context of a thought experiment, the concept of the STOEM Universe's infinite fractal iteration as computational steps can be depicted in the following manner:

1. Consider a Universe U, modeled as an infinite system of interconnected fractals.
2. Each fractal in this Universe is represented by F_i for i = 1 to ∞, where each fractal is a function of all the other fractals.
3. Every iteration n over each fractal F_i can be equated to a computational step C_n. Thus, as we go deeper into the fractal (n → ∞), we perform more computational steps.
4. In this model, time T is not linear but iterative. Each unit of time can be represented as an iteration over the fractal structure. Hence, T = n, where n is the depth of iteration in the fractal.
5. Now, let's consider a computational problem P with size s (in traditional computation, this would mean the size of the input).
6. In the conventional sense, the complexity of solving P would be a function of s, growing exponentially or polynomially, resulting in a certain number of computational steps required to solve P.
7. However, in our STOEM Universe model, the number of computational steps available is infinite (as n → ∞), making the growth of problem size s effectively irrelevant in terms of the feasibility of computation. Hence, in the context of the STOEM Universe, all problems, irrespective of their size, can be computationally handled within the infinite fractal iterations.

This thought experiment thus illustrates how the conventional constraints of computational complexity, such as the distinction between P and NP problems, might be reimagined in a universe where time equals fractal iteration and infinite computational resources are inherently available.

https://www.researchgate.net/publication/370983804_Spiritual_Theory_of_Everything_A_Mathematical_Approach_to_Infinity_God_and_the_Nature_of_Reality_Introduction

https://www.researchgate.net/publication/370985164_Exploring_the_Spiritual_Theory_of_Everything_Model_STOEM_Intersections_of_Spirituality_Mathematics_and_Cosmology